

REMARKS/ARGUMENTS

Status of the Application

In the Office Action, claims 1-10 and 13 were rejected. In the present Amendment, claim 1 has been amended. Thus, claims 1-10 and 13 are pending. No new matter has been added.

Rejections Under 35 U.S.C § 103(a)

Claims 1-6 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson et al. (U.S. Patent No. 6,387,519). These rejections are respectfully traversed. First, Applicants respectfully submit that the disclosure of Anderson et al. fails to teach one of ordinary skill in the art the use of reactive diluents with Applicants' claimed process. During the course of a patent prosecution, the Examiner must use the meaning of claim terms as the Applicant has defined them in the specification as long as the claim term is not given a meaning repugnant to its usual meaning. In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989); In re Hill, 161 F.2d 367, 369 (C.C.P.A. 1947); see also MPEP § 2173.05(a). The Examiner asserted that, in Anderson et al., a component of formula (I) is a silane monomer that can act as a reactive diluent. This assertion is against the teaching of Anderson et al. where component (I) is a surface active agent, not a reactive diluent (col. 18, lines 37-67). According to Anderson et al., a surface acting agent is "any material which tends to lower the solid surface tension or surface energy of the cured composition or coating" (col. 16, lines 12-14). Reactive diluents, according to the Applicants' disclosure, are "reactive, polymerizable liquid monomers that act as solvents for the system and participate in the crosslinking reaction" (pg. 3, lines 33-34). The teachings in Anderson et al. that the Examiner is relying on are directed to powder coatings which obviously do not contain liquids and are not related to the liquid coating composition of applicants' invention that contains a reactive diluent. Because the Examiner impermissibly included a surface acting agent in the definition of reactive diluent, Applicants submit that the rejection of these claims is no longer valid.

The Examiner further argues that a component of Anderson et al.'s disclosure is a silane monomer in a liquid form. Applicants respectfully submit that this cannot

be the case. Formula (I) of Anderson et al. is a powder composition (col. 18, lines 49-51). The plain meaning of the word "powder" includes in it an implied lack of liquid. As such, a component of formula (I) cannot be a silane monomer in liquid form because of the requirement that the composition be a powder.

Further, Formula (I) of Anderson et al. describes the structural unit of a polymer, a polysiloxane, and is not a reactive diluent or a monomer. The polysiloxane may have unsaturated functional groups that can participate in crosslinking reactions via irradiation with UV but they are not monomeric liquid compounds that act as reactive diluents.

The Examiner's speculation that one skilled in the art could form a powder slurry by using silane monomers as reactive diluents based on the teachings of Anderson et al. is completely in error. First of all, applicants' invention is not directed to a powder slurry but to a process for vehicle repair using a filler coating composition. There are no powder particles present in the form of a slurry. Secondly, the polysiloxanes disclosed by Anderson et al. are polymers and not liquids so a liquid coating composition is not formed. It appears that the Examiner either does not understand the common meaning of reactive diluent that has been set forth in the application or has purposely twisted it in such a manner so as to come up with this speculative rejection.

Even if Anderson et al. disclosed a silane monomer in liquid form, which is not the case, the Examiner used an impermissible obvious to try standard in rejecting claims 1-6 and 13. The disclosure of Anderson et al. contains so many possible combinations of coating compositions that is unclear how one of ordinary skill in the art could determine that a reactive diluent exists in the disclosure. This is especially true given the fact that there is no mention of reactive diluents in the Anderson et al. disclosure, let alone any indication of compatibility of reactive diluents with Anderson et al. coating compositions.

Furthermore, claim 1 has been amended so that the process is one for a repair coating of vehicle substrates. The Examiner argued that revitalization of the gloss of a polymeric coating implies repair coating of substrates. Revitalization is not repair and further revitalization of gloss only implies that the outer surface of the coating is being modified. Applicants' invention is directed to the use of a filler

coating to make repairs to a vehicle substrate. The function of a filler coating is to cover the unevenness of the damaged surface area of a vehicle and to significantly improve stone chipping of the resulting coating. Gloss is irrelevant since a filler coating provides a matt finish and require an additional coating if high gloss is required. The disclosure of Anderson et al. does not teach one of ordinary skill in the art to repair damaged vehicles but is only direct to scratch resistance finishes.

The Examiner also mischaracterizes the term "particles" as used by Anderson et al. Applicants do not deny that their coating compositions contain particles; it is inherent in their invention. The particles used by Anderson et al., however, are formed from ceramic materials (col. 9, lines 63-67); inorganic oxides of silica (col. 10, lines 11-25); nonpolymeric, inorganic materials (col. 10, lines 26-38); lamellar structure materials (col. 12, lines 50-58); nonpolymeric, organic materials (col. 12, lines 59-63); polymeric, inorganic materials (col. 12, line 64 – col. 13, line 6); or polymeric, organic materials (col. 13, lines 8-22). The Examples in Anderson et al. all use inorganic particles in the form of colloidal silica dispersions (col. 47, lines 17-21) or fumed silica dispersions (col. 47, lines 33-39). It is clear from the Anderson et al. disclosure that these particles are not part of the polymerized coating composition but rather are suspended in the coating composition (see, e.g., col. 6, lines 61-67, where the particles can actually protrude above the coating surface). Thus, the Examiner is incorrect when stating that Applicants' coating compositions are substantially identical to those of Anderson et al. Applicants' claimed invention is simply not directed to the use of particles, as disclosed in Anderson et al., in coating compositions.

Claims 7 and 8 were rejected as being unpatentable over Anderson et al. in view of Harris et al. (U.S. Patent No. 5,596,043). These rejections are respectfully traversed. In addition to the above arguments that will not be repeated, Applicants submit that Anderson et al. cannot be combined with Harris et al. to produce the inventions in claims 7 and 8. A prior art reference cannot be modified if the modification renders the reference "inoperable for its intended purpose." In re Fritch, 972 F.2d 1260, 1265 n.12 (Fed. Cir. 1992) (citing In re Gordon, 733 F.2d 900, 902 (Fed. Cir. 1984)). The coating compositions of Harris et al. are not UV curable, but rather are thermally cured (see col. 5, lines 20-28; Example 3). In fact, Harris et al.

state that UV radiation causes intercoat degradation of the primer layer (col. 1, lines 27-33). Applicants' claimed invention requires that the coating composition be by cured by "irradiation with high energy radiation" (see step b) of claim 1). Thus, one of ordinary skill in the art would not combine a process capable of being cured by UV irradiation (Anderson et al.) with one incapable of being cured by UV irradiation (Harris et al.) to produce a process that requires irradiation by high energy radiation. In essence, the combination of Anderson et al. and Harris et al. teaches away from Applicants' claimed invention because of Harris et al.'s requirement of thermal curing.

Claims 9 and 10 were rejected as being unpatentable over Anderson et al. in view of Richard (U.S. Patent No. 5,091,211). These rejections are respectfully traversed. In addition to the above arguments that will not be repeated, Applicants submit that Anderson et al. cannot be combined with Richard to produce the inventions in claims 9 and 10. Richard is directed the manufacture of vinyl floor and wall coverings and teaches the use of methacryloyl-modified phosphoric acid derivates in UV curable topcoats. These topcoats are based on acrylated polyurethanes with improved adhesion of topcoats on vinyl resin layers, preferably in the form of vinyl floors. One of ordinary skill in the art would not combine Anderson et al. with a reference directed towards vinyl floor and wall coverings to provide limitations of claims 9 and 10. Furthermore, it is questionable whether vinyl floor and wall coverings are an analogous art to repair coatings of vehicles as is required before a reference can be included in the prior art available for an obviousness rejection. MPEP § 2141.01(a).

Summary

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

By: Hilmar L. Fricke

Hilmar L. Fricke

Attorney for Applicants

Reg. No.: 22,384

Telephone: (302) 984-6058

Facsimile: (302) 658-1192

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